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| 10/531,787 | 03/15/2006 | Jens Schafer | INA-PT123 (4095-18-US) | 1497 |
| 3624 | 7590 | 06/15/2007 | EXAMINER | |
| VOLPE AND KOENIG, P.C. | | | CHANG, CHING | |
| UNITED PLAZA, SUITE 1600 | | | | |
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| PHILADELPHIA, PA 19103 | | | 3748 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/531,787

Applicant(s)

SCHAFFER ET AL.

Examiner

Ching Chang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-18 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-18 and 20 is/are rejected..
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

This Office Action is in response to the amendment filed on 04/24/07. Claims 1-4, and 19 are cancelled as requested.

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required; See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

The citizenship of each inventor has not been identified properly, it should be either Germany or United Kingdom, instead of " German " or " Gro**ß**britannien ".

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on 10/17/2002. It is noted, however, that applicant has not filed a certified copy of the Germany 102 48 351.5 10/17/2002 application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 5-18, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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More specifically, "preferably" in line 12 of claims 5, 10, 14-15, 18, in lines 21, and 23 of claim 5, and in line 5 of claim 16, renders the claimed subject matter in claims 5-18, and 20 indefinite.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. ***Claims 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohlendorf et al. (US Patent 4,986,801) in view of Tenfelde (DE '544).***

Ohlendorf discloses a camshaft adjuster for adjusting and fixing a position of a angle of rotation of a camshaft (11) relative to a crankshaft (203) of a reciprocating-piston internal-combustion engine, comprising a high transmission and friction-reduced adjusting gear mechanism (2, 4, 6, 7) comprising a drive shaft rotationally fixed to the crankshaft, a driven shaft rotationally fixed to the camshaft, and an adjusting shaft (having 18) connected to an adjusting motor shaft of an adjusting motor (24), the adjusting gear mechanism and the adjusting motor are formed as separate units and are connected to each other by a rotational backlash-free, disengaging coupling; wherein the adjusting motor is an electric adjusting motor; wherein the coupling has two parts, which can be joined together and of which one (20) is rotationally fixed to the adjusting motor shaft and the other (18) is rotationally fixed to the adjusting shaft; wherein the coupling has two parts which can be joined together, one (18) of the parts is

formed integrally with the adjusting shaft and the other (20) of the parts is formed integrally with the adjusting motor shaft, one of the two parts is formed as the outer part and the other is formed as the inner part, and the two parts can be inserted one into the other in a rotational backlash-free way,

Ohlendorf discloses the invention as recited above, however, fails to disclose the coupling being formed as a profiled shaft coupling.

The patent to Tenfelde on the other hand, teaches that it is conventional in the shaft coupling art, to utilize a profile shaft coupling (See Figs. 1-13) with spring (11) between a drive shaft and a driven shaft.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the profile shaft coupling as taught by Tenfelde in the Ohlendorf device, since the use thereof would provide an easier assembled and maintained camshaft adjuster.

7. Claims 5-6, 10, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohlendorf et al. (US Patent 4,986,801) in view of Grashorn (US Patent 3,593,933).

Ohlendorf discloses a camshaft adjuster for adjusting and fixing a position of a angle of rotation of a camshaft (11) relative to a crankshaft (203) of a reciprocating-piston internal-combustion engine, comprising a high transmission and friction-reduced adjusting gear mechanism (2, 4, 6, 7) comprising a drive shaft rotationally fixed to the crankshaft, a driven shaft rotationally fixed to the camshaft, and an adjusting shaft (having 18) connected to an adjusting motor shaft of an adjusting motor (24), the

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adjusting gear mechanism and the adjusting motor are formed as separate units and are connected to each other by a rotational backlash-free, disengaging coupling; wherein the adjusting motor is an electric adjusting motor; wherein the coupling has two parts, which can be joined together and of which one (20) is rotationally fixed to the adjusting motor shaft and the other (18) is rotationally fixed to the adjusting shaft; wherein the coupling has two parts which can be joined together, one (18) of the parts is formed integrally with the adjusting shaft and the other (20) of the parts is formed integrally with the adjusting motor shaft, one of the two parts is formed as the outer part and the other is formed as the inner part, and the two parts can be inserted one into the other in a rotational backlash-free way,

Ohlendorf discloses the invention as recited above, however, fails to disclose the coupling being formed as a profiled shaft coupling.

The patent to Grashorn on the other hand, teaches that it is conventional in the shaft coupling art, to utilize a profile shaft coupling (1, 5, 9; 1', 5', 9') between a drive shaft (7) and a sleeve (3)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the profile shaft coupling as taught by Grashorn in the Ohlendorf device, since the use thereof would provide an easier assembled and maintained camshaft adjuster.

8. ***Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohlendorf (as applied to claim 5 above) in view of Kamiyama et al. (US 5,687,690).***

The modified Ohlendorf device discloses the invention, however, fails to disclose the coupling being a magnetic shaft coupling.

The patent to Kamiyama on the other hand, teaches that it is conventional in the engine art, to utilize a magnetic shaft coupling (56) with a pair of permanent magnets.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the magnetic shaft coupling as taught by Kamiyama in the modified Ohlendorf device, since the use thereof would provide an alternative camshaft adjuster.

Response to Arguments

9. Applicant's arguments with respect to claims 5-10, and 15-17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ching Chang whose telephone number is (571)272-4857. The examiner can normally be reached on M-Th, 7:00 AM -5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571)272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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